Commonwealth of Massachusetts
JOINT COMMITTEE ON TELECOMMUNICATIONS, UTILITIES AND ENERGY
MASSACHUSETTS GENERAL COURT
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Mr. Mark Sylvia—Commissioner
Department of Energy Resources
100 Cambridge St., Suite 1020
Boston, MA 02114

RE: REPORT OF THE COMMITTEE ON PROPOSED FINAL WOODY BIOMASS ELIGIBILITY REGULATION (225 CMR 14.00)

Dear Commissioner Sylvia:

First, we would like to take this opportunity to express our appreciation to you and your staff for your efforts thus far in implementing the Green Communities Act of 2008. We applaud your continued dedication to the promotion and development of renewable and alternative energy resources. We are encouraged by your efforts to understand the complicated and evolving science and technology involved in these areas. Pursuant to Section 12 of Chapter 25A of the General Laws, the Joint Committee on Telecommunications, Utilities and Energy reviewed the proposed final regulation ("regulation") pertaining to the eligibility of woody biomass fuel and biomass units under the Renewable Energy Portfolio Standard ("RPS").

While the Committee supports your efforts to better align the Commonwealth's financial incentives for clean energy with sources of power that will help meet greenhouse gas reduction goals, we respectfully bring to your attention several issues the Committee identified during its investigation.

A. APPROPRIATE SCOPE OF THE RENEWABLE ENERGY PORTFOLIO STANDARD

Every source of energy, renewable or otherwise, is not without tradeoffs. Biomass is no exception. Woody biomass is a finite resource and its harvest has the potential to impact the long-term sustainability of forest lands. In considering the development of biomass, the Commonwealth must strike a balance among emissions, promoting a diverse energy portfolio, and other issues. If not managed carefully, large-scale biomass development may damage ecosystems, produce harmful air pollution, and produce net greenhouse gas emissions. Implementing proper policy is essential to ensuring the sustainable development of biomass resources that will enable the Commonwealth to meet its clean energy and greenhouse gas reduction goals, while minimizing potential adverse consequences.

In establishing eligibility criteria for woody biomass fuel and biomass units under the RPS, the Department of Energy Resources ("DOER") attempts to strike the appropriate balance for the development of biomass resources. The regulation strives to ensure that the goals of the Global Warming Solutions Act are met through both the eligibility of feedstocks that result in low net carbon emissions as well as the required demonstration of greenhouse gas emissions reductions over a 20-year time period. The regulation also includes safeguards against clear-cutting and non-sustainable forestry practices by establishing restrictions on forest derived biomass removal. The regulation attempts to limit some of the possible adverse public health outcomes by explicitly prohibiting construction and demolition waste as an eligible fuel; however, the regulation does not attempt to directly address emissions of particulate matter or other hazardous air pollutants. Further, the regulation establishes an efficiency requirement that drives the development of combined heat and power and other thermal-led biomass applications, which represent the most efficient use of finite woody biomass resources. Taken together, these key provisions of the regulation help to guide the development of biomass resources in an appropriate direction.

Although the RPS and associated regulation may be an appropriate mechanism for managing the tradeoffs of electricity generation from woody biomass, namely by establishing criteria for feedstocks, greenhouse gas emissions, and forestry sustainability, the RPS may not be the appropriate mechanism for promoting thermal-led biomass applications. Promoting the highest and best use of finite woody biomass resources, that is to say combined heat and power and other thermal-led applications, is an important and laudable goal. However, the RPS was designed to promote new, renewable sources of electricity generation. Thus, it may be more appropriate for the Legislature or DOER to include additional incentives for thermal applications in the Alternative Energy Portfolio Standards ("APS") or establish other programs to promote this type of biomass development.

B. Regulatory Clarity for Biomass Applications Using Feedstocks Other Than Woody Fuel

Section 14.05(1)(a)(7)(f) makes clear that eligibility criteria (i.e. fuel certification, efficiency, greenhouse gas reduction) for biomass generation units only apply to those units that use an eligible biomass woody fuel or a manufactured biomass fuel. Generation units that utilize other eligible biomass fuels, such as by-products or waste from animals or agricultural crops, food or vegetative material, and anaerobic digester gas, are not subject to these additional requirements. However, this exemption is not explicitly stated in the regulation. In order to better effectuate DOER's intent to apply the eligibility criteria only to woody biomass applications, the regulation could provide additional clarity that exempts biomass applications using feedstocks other than woody fuel (i.e. anaerobic digesters) from these eligibility criteria.

C. Treatment of Previously Qualified Biomass Generation Units

Section 14.05(8)(d) provides for the eligibility criteria to be phased in for previously qualified biomass generation units, requiring existing units to meet all criteria beginning in 2015 to remain qualified for the RPS. Existing units, built based on acceptable state regulatory frameworks at the time, are now being called upon to make extensive changes due to major

policy changes. Such units would likely be able to meet the fuel certification and greenhouse gas reduction requirements within the timeframe specified in the regulation. However, existing facilities are not likely to be able to meet the efficiency requirements, as it is difficult and expensive to alter the design of an existing facility to achieve these standards.

Without a longer timeframe for implementation of the efficiency requirements, existing facilities would likely be disqualified from the RPS in 2015, taking a significant portion of currently generated Class I RECs out of the RPS market in Massachusetts. Power from biomass plants provided 27% of the renewable energy purchased by retail electricity suppliers in Massachusetts in order to comply with RPS requirements in 2009. With the uncertainty surrounding the progression of various renewable energy projects, such as large scale offshore wind development, we believe a five-year extension to 2020 for implementation of the efficiency requirement for existing units would promote an orderly transition, allowing the RPS market to develop additional qualifying resources to prepare for the possible loss of Class I RECs from existing biomass generation units and giving existing facilities a better opportunity to modify, if possible.

We are also mindful of the significant investments that have been made in the biomass industry in reliance of the original RPS framework, and believe fairness dictates an adequate opportunity for these existing plants to transition into compliance with new regulation. As we strive to achieve our greenhouse gas reduction goals, we must be aware of the chilling effects that significant and untimely rule changes may have on investment and development. To the extent that DOER is capable, it should encourage a predictable regulatory framework under which developers can operate to ensure that the number of renewable energy sources continues to grow in the Commonwealth.

D. Approach to Forestry Sustainability and Forest-Derived Biomass Removal

Section 14.05(8)(a)-(b) outlines the fuel certification, verification, and enforcement process for eligible woody biomass or manufactured biomass fuels. For forest derived eligible biomass woody fuel, the regulation includes a limit on the amount of this fuel that can be harvested at a site, based on soil conditions. Addressing potential soil nutrient problems ensures the foundation of forest ecosystems, the soil, is protected. However, this does not address the full range of ecological values necessary for a sound approach to biomass harvesting, such as recognizing the importance of standing dead and dying material essential to wildlife habitat. Additionally, the forestry sustainability requirements and harvest restrictions, as written, may be difficult to implement, enforce, and monitor, as they substantially rely on the field foresters for compliance.

While DOER consulted with forestry experts at the Department of Conservation and Recreation, they could also consider incorporating best forest management practices from other states as well as retention and harvesting guidelines developed by professional foresters into the regulation in order to encourage all aspects of sustainable forestry. In addition, incorporating best practices and guidelines developed by professional foresters may help to harmonize RPS forestry requirements with existing requirements and ensure compliance among those in the field.

E. Approach to Carbon Accounting

In addition to the regulation, DOER developed a guideline for performing a lifecycle GHG analysis to assist applicants in determining whether the lifecycle GHG reduction threshold, found in Section 14.05(1)(a)(7)(f)(iii), is met. This is the first time that the guideline has been presented for public review or comment. As currently presented, the guideline treats all eligible biomass as residues, using the same carbon accounting assumptions for both whole trees and tops and branches. In effect, this treats the harvest of whole trees for biomass as carbon-neutral, even though that practice would have a much different carbon profile. Ultimately, determining lifecycle emissions associated with the use of whole trees from thinning operations requires a separate, specific analysis, which is not included in the guideline. We urge DOER to provide a forum for public comment and technical review of the proposed carbon accounting tool before finalizing this approach.

Thank you for taking the time to consider and address the Committee's concerns through explanation, re-evaluation, or revision of the proposed final regulation. The Committee urges DOER to periodically review and report on the impact of the regulation once it is finalized and implemented. We look forward to playing an ongoing role in the oversight and review of this process to ensure that it assists the Commonwealth in meeting its clean energy and climate change goals.

Sincerely,

Benjamin B. Downing
Senate Chairman

John D. Keenan
House Chairman